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ABSTRACT

The study investigated motivation factors in 368 students in grades 4 through 9, including 180 students identified as academically gifted. Ss were administered the Junior Index of Motivation (JIM Scale) which measures six motivational factors: positive-negative school attitude, belongingness-alienation, idealism-pragmatism, personal control-fatalism, optimism-pessimism, and flexibility-dogmatism. Ss' responses were sorted by grade clustering (4 to 6--elementary, 7 to 9--secondary) and gifted vs. nongifted. Among findings were that individual responses by gifted Ss indicated that the secondary student feels less challenged by the activities assigned and feels less in control in the areas of topic choice and type of activity assigned. (SB)

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A CRITICAL ANALYSIS OF MOTIVATION OF ACADEMICALLY GIFTED LEARNERS

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A CRITICAL ANALYSIS OF MOTIVATION OF ACADEMICALLY GIFTED LEARNERS

Teachers concerned with increasing the classroom performance of their gifted students must be sensitive to and aware of student characteristics and environmental factors at work in the classroom. Research by Pervin (1968) demonstrates that the degree to which the learning environment meets individual student needs has an impact on the student's academic performance and personal satisfaction. Studies by Thelen (1967), Hunt (1971, 1975) and Hunt and Sullivan (1974) show that a variety of personal characteristics interact with environmental factors and lead to improved or impaired student performance. The better the match between characteristics and environmental variables, the more productive the outcome. The student characteristic most commonly discussed as effecting student productivity is motivation.

Motivation as a general construct does not suffer from underexposure. Allport (1955), Combs and Snugg (1959) and Maslow (1954), among others, supply a vast literature documenting the importance of motivation in human behavior. Motivation as it relates to the classroom has also been dealt with in great depth. Athey (1976), Carter (1964), Frymier (1970), and Ryan (1978) provide a body of literature documenting the relationship between motivation and success in school-like activities. Motivation research related to gifted students has evolved around the relationship between motivation and underachievement.

Research by Barrett (1957), and Gowan (1955, 1957, and 1960) among others deals with interest persay and generalizes to include statements about motivation. The construct of motivation related to gifted students has yet to be systematically studied.

Purpose

The purpose of this study was to answer three questions:

(1) What motivation factors are manifested by academically gifted learners (i.e., belongingness-alienation, positive school attitude-negative school attitude, personal control-fatalism, optimism-pessimism, flexibility-dogmatism, and idealism-pragmatism)?

(2) What motivation factors are manifested by academically non-gifted learners? I don't understand this term?

(3) If motivation is different between academically gifted and academically non-gifted students, in what dimensions are they different?

Procedures

The study sample included 368 elementary and secondary school students (grades 4-9) randomly selected from public and private schools in the Dallas-Fort Worth Metroplex. One hundred eighty subjects were identified as academically gifted and 188 as academically non-gifted. Classification was based on individual IQ scores (in excess of 130), ratings from teachers and school counselors, parent surveys, and scores on standard achievement tests.

Subjects were administered the Junior Index of Motivation (JIM Scale). The JIM Scale was selected as the standard instrument for measuring and analyzing subjects' level of motivation because of its ability to measure motivation as it relates to six basic components of motivation. The Scale measures six motivational factors: positive-negative school attitude, belongingness-alienation, idealism-pragmatism, personal control-fatalism, optimism-pessimism, and flexibility-dogmatism. The JIM Scale places a subject's converted motivation score on a continuum from high to low. The Scale also allows the six motivation factors listed above to be analyzed using a weighted scale. The Scale was developed from a study of hundreds of adolescents' responses to particular items in a testing situation. the JIM Scale includes 80 items, only 50 of which are scored. Time is not a factor. Correlations of JIM Scale scores with other measures of academic motivation are reported to be high (Frymier, 1970). Further, in both test-retest and split-half analyses, the Scale's reliability is reported to be as high as r = .83 (Frymier, 1970).

Results

An analysis of responses on the JIM Scale was performed using a weighted scale. Subject responses were sorted by grade clustering, 4-6 (elementary) and 7-9 (secondary). Gifted and non-gifted subjects' responses were compared. This Data is displayed in Table One:

TABLE ONE

Mean and Standard Deviation by Group

Level	N	Mean	Standard Deviation
Non-Gifted (Elementary)	94	103.133	20.583
Gifted (Elementary)	91	138.660	7.787
Non-Gifted (Secondary)	94	92.494	13.360
Gifted (Secondary)	89	76.086	8.998

A T-test comparing the means of Gifted and Non-Gifted (elementary) showed a significant difference between groups ($p < .001$). T-test analysis comparing the means of Gifted and Non-Gifted (secondary) showed a significant difference between samples ($p < .001$). A T-test comparing Gifted (elemenatary) and Gifted (secondary) showed a significant difference ($p < .001$). T-test analysis comparing the means of Non-Gifted (elementary) and Non-Gifted (secondary) showed no significant difference between groups.

Additional analysis was accomplished to rank order responses by motivational factors found in the JIM Scale (see Procedures Section). This rank ordering was accomplished by separating responses by weighted factors. Strong agreement was represented

by weighted scores of 4.0 to 3.0 (compared to a possible weighted factor of 4). Neutral feelings were factor scores between 2.9 and 2.0. Strong disagreement was assigned to scores between 1.9 and 1.0 (with 1.0 being the lowest possible weighted factor). The results of this analysis are reported in Tables Two and Three. Only the positive dimensions of each motivation factor are listed to aid in the clarity of presentation.

TABLE TWO

Elementary Subjects

Motivation Factor	Gifted	Non-Gifted
Positive School Attitude	Agreement	Neutral
Belongingness	Agreement	Agreement
Idealism	Agreement	Neutral
Personal Control	Disagreement	Disagreement
Optimism	Neutral	Agreement
Flexibility	Disagreement	Agreement

TABLE THREE

Secondary Subjects

Motivation Factor	Gifted	Non-Gifted
Positive School Attitude	Disagreement	Disagreement
Belongingness	Disagreement	Agreement
Idealism	Disagreement	Neutral
Personal Control	Disagreement	Agreement
Optimism	Disagreement	Neutral
Flexibility	Disagreement	Neutral

Discussion

This study sought to identify motivational factors manifested by academically gifted and non-gifted learners. It further intended to compare motivational factors between academically gifted and non-gifted learners. Results of this study indicate that motivation does indeed differ between these subjects. Results also indicate that there is significant difference between motivational factors of elementary and secondary gifted learners.

The results of this study raise some interesting questions for teachers of the academically gifted. The direction and significance of difference in motivational factors suggest not only that motivation differs between academically gifted and non-gifted learners but that this difference has a negative